

## Achievements

For this assignment, you will not be creating a new app, but adding functionality to a (working) previous app. Many applications use achievements to keep users interested and provide goals to work towards. You will integrate this functionality into an app of your choice.

In general, the layout and nature of your achievement system is up to you, subject to the conditions outlined below. However, this assignment will demand your use of persistent, or stored, data. More than most assignments, you will have to carefully plan your storage system before you start coding.

To receive full credit on this assignment, you must:

- Include at least four achievements that a user can reach.
- When displayed, each achievement must:
  - Include an icon representative of the achievement.
  - Include both a name and short descriptor of the achievement.
    - In cases where users may progress toward the achievement rather than simply reach it as a one-off (e.g., “times scored over 100” vs. “play one game”), the descriptor should show the user’s progress toward this achievement.
  - The achievement should appear regardless of whether or not it has been reached, but should appear differently once it is reached. This can be “grayed out” vs. full-color, if you’d like.
- Include at least two different types of achievements, meaning that the scoring system for at least two achievements should be distinctly different.
  - For example, in a route-mapping app, one achievement may be whether or not a user has logged a route, and one may be that a logged route reaches a certain distance.